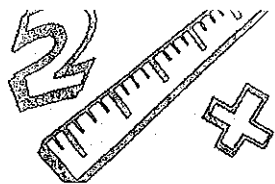


Unit 6

Lesson 4-5C

Practice

Packet



Name: _____

6.4 Practice

Convert to: inches, feet or yards as shown.

Use ratios to help set up conversion, if necessary.

Units of Measure Conversions - No Remainders

1. 57 yd = _____ in 2. 44 ft = _____ in

3. 252 ft = _____ yd 4. 2,592 in = _____ yd

5. 864 in = _____ ft 6. 270 ft = _____ yd

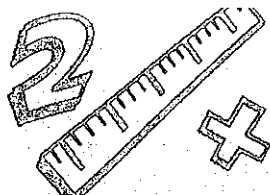
7. 54 ft = _____ yd 8. 1,296 in = _____ yd

9. 77 yd = _____ in 10. 432 in = _____ ft

11. 30 yd = _____ ft 12. 17 yd = _____ ft

13. 92 yd = _____ ft 14. 45 ft = _____ yd

15. 144 in = _____ ft 16. 49 yd = _____ ft



Name: _____

6.4 Fractions

Convert from or to: ounces, quarts or gallons as requested.

Use ratios to help set-up conversion, if necessary.

Units of Measure: Conversions

1. 19 gal = qt 2. 6 fl oz = qt

3. 12 gal = fl oz 4. 50 qt = gal

5. 22 gal = qt 6. 47 gal = qt

7. 47 qt = gal 8. 11 qt = gal

9. 29 qt = fl oz 10. 42 gal = qt

11. 28 fl oz = qt 12. 24 qt = gal

13. 49 qt = fl oz 14. 26 gal = qt

15. 41 qt = gal 16. 9 gal = fl oz

Teacher : _____

Date : _____

6.5% practice

Common Percent TableFill in
the missing
values.

Fraction	Decimal	Percent
	0.05	
		10 %
$\frac{1}{8}$		
		20 %
	0.25	
		30 %
	$0.\bar{3}$	
		$37\frac{1}{2}\%$
		40 %
$\frac{1}{2}$		
	0.6	
	0.625	
		$66\frac{2}{3}\%$
		70 %
		75 %
$\frac{4}{5}$		
	0.9	



6.5A Percents, Fractions, Decimals Practice

Date _____ Period _____

Write each as a fraction.

1) 50%

2) 54%

3) 385%

4) 96%

5) 14%

Write each as a decimal. Round to the thousandths place.

6) 38%

7) 0.8%

8) 0.5%

9) 7%

10) 80%

Write each as a percent. Round to the nearest tenth of a percent.

11) 0.98

12) 0.5

13) 0.09

14) 0.34

15) 0.92

16) $\frac{13}{45}$

17) $\frac{3}{25}$

18) $\frac{1}{5}$

19) $\frac{11}{15}$

20) $\frac{21}{31}$

6.5A Finding a Percent of a Number practice

Date _____ Period _____

Solve each problem.

- 1) What is 40% of 68?
- 2) What is 46% of 68?
- 3) What is 36% of 44?
- 4) 69% of 46 is what?
- 5) What is 50% of 45?
- 6) What is 59% of 21?
- 7) 66% of 21 is what?
- 8) 72% of 22 is what?
- 9) 56% of 45 is what?
- 10) What is 53% of 21?
- 11) What is 33% of 68?
- 12) What is 76% of 46?
- 13) 43% of 44 is what?
- 14) 79% of 22 is what?
- 15) What is 63% of 45?

Reteaching 6-5**Fractions, Decimals, and Percents**

Write $\frac{7}{8}$ as a percent and 64% as a fraction in lowest terms.

Divide $7 \div 8$.

$$\begin{array}{r} 0.875 \\ 8 \overline{)7.000} \\ \underline{64} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$$\frac{7}{8} = 0.875$$

$$0.875 = 87.5\%$$

$$\text{Thus } \frac{7}{8} = 87.5\%.$$

64% means 64 parts per 100.

$$64\% = \frac{64}{100}$$

$$= \frac{2^4}{2^2 \cdot 5^2}$$

$$= \frac{16}{25}$$

$$\text{Thus } 64\% = \frac{16}{25}.$$

Write each fraction as a percent.

1. $\frac{7}{10}$ _____

2. $\frac{3}{5}$ _____

3. $\frac{11}{20}$ _____

4. $\frac{17}{25}$ _____

5. $\frac{1}{5}$ _____

6. $\frac{39}{100}$ _____

7. $\frac{1}{20}$ _____

8. $\frac{13}{50}$ _____

9. $\frac{5}{8}$ _____

10. $\frac{3}{16}$ _____

Write each percent as a fraction in simplest terms.

11. 15% _____

12. 12.5% _____

13. 76% _____

14. 14% _____

15. 60% _____

16. 97% _____

17. 25% _____

18. 30% _____

19. 82% _____

20. 68.75% _____

Reteaching 6-6**Proportions and Percents**

What percent of 98 is 24.5?

You can solve percent problems by writing and solving a proportion.

Any percent problem of the form $x\%$ of a is b can be written as:

$$\frac{x}{100} = \frac{b}{a}$$

$$\text{so } \frac{x}{100} = \frac{24.5}{98}$$

Write a proportion.

$$98x = 2,450$$

Write cross products.

$$\frac{98x}{98} = \frac{2,450}{98}$$

Divide each side by 98.

$$x = 25$$

Simplify.

24.5 is 25% of 98.

Write a proportion. Then solve. Where necessary, round to the nearest tenth or tenth of a percent.

- | | |
|---|--|
| 1. What percent of 75 is 60?
_____ | 2. What percent of 68 is 51?
_____ |
| 3. What percent is 17 of 25?
_____ | 4. What percent of 51 is 65?
_____ |
| 5. What percent of 144 is 126?
_____ | 6. What percent of 95 is 25?
_____ |
| 7. Find 24% of 120.
_____ | 8. Find 75% of 76.
_____ |
| 9. Find 260% of 30.
_____ | 10. Find $27\frac{1}{2}\%$ of 96.
_____ |
| 11. Find 38% of 32.
_____ | 12. Find 17% of 85.
_____ |
| 13. 40% of x is 28. What is x ?
_____ | 14. 9% of k is 27. What is k ?
_____ |
| 15. 75% of p is 12. What is p ?
_____ | 16. 0.9% of h is 276. What is h ?
_____ |
| 17. 13% of r is 209. What is r ?
_____ | 18. 68% of j is 44. What is j ?
_____ |

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Reteaching 6-7**Percents and Equations**

You can solve percent problems by writing and solving an equation.

8 is 16% of what?

$8 = 0.16 \cdot n$ Write an equation. Write the percent as a decimal.

$\frac{8}{0.16} = \frac{0.16n}{0.16}$ Divide each side by 0.16.

$50 = n$ Simplify

8 is 16% of 50.

Write and solve an equation. Where necessary, round to the nearest tenth or tenth of a percent.

1. What percent is 84 of 60?

3. What percent is 22 of 33?

5. What percent is 18 of 48?

7. Find 37.5% of 104.

9. Find 68% of 150.

11. Find 12.5% of 56.

13. 95% of h is 60. What is h ?

15. 30% of n is 42. What is n ?

17. 25% of y is 96. What is y ?

2. What percent of 40 is 26?

4. What percent of 32 is 28?

6. What percent of 81 is 18?

8. Find 0.4% of 25.

10. Find 180% of 65.

12. Find 86% of 55.

14. 24% of m is 17. What is m ?

16. 28% of b is 49. What is b ?

18. 72% of k is 234. What is k ?



Name: _____

6.4 Practice

Convert to: inches, feet or yards as shown.

Use ratios to help set up conversion, if necessary.

Units of Measure Conversions - No Remainders

1. $57 \text{ yd} = \boxed{2052 \text{ in}}$ in 2. $44 \text{ ft} = \boxed{528 \text{ in}}$ in

3. $252 \text{ ft} = \boxed{84 \text{ yd}}$ yd 4. $2,592 \text{ in} = \boxed{72 \text{ yd}}$ yd

5. $864 \text{ in} = \boxed{72 \text{ ft}}$ ft 6. $270 \text{ ft} = \boxed{90 \text{ yd}}$ yd

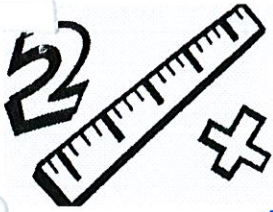
7. $54 \text{ ft} = \boxed{18 \text{ yd}}$ yd 8. $1,296 \text{ in} = \boxed{36 \text{ yd}}$ yd

9. $77 \text{ yd} = \boxed{2772 \text{ in}}$ in 10. $432 \text{ in} = \boxed{36 \text{ ft}}$ ft

11. $30 \text{ yd} = \boxed{90 \text{ ft}}$ ft 12. $17 \text{ yd} = \boxed{51 \text{ ft}}$ ft

13. $92 \text{ yd} = \boxed{276 \text{ ft}}$ ft 14. $45 \text{ ft} = \boxed{15 \text{ yd}}$ yd

15. $144 \text{ in} = \boxed{12 \text{ ft}}$ ft 16. $49 \text{ yd} = \boxed{147 \text{ ft}}$ ft



Name: _____

6.4 Practice

Convert from or to: ounces, quarts or gallons as requested.

Use ratios to help set-up conversion, if necessary.

Units of Measure: Conversions

1. 19 gal = **76 qt** qt 2. $\frac{6 \text{ fl oz}}{32} = \frac{3}{16} \text{ qt}$

3. 12 gal = **1536 fl oz** fl oz 4. 50 qt = **12.5 gal** gal
 $\times 64$

5. 22 gal = **88 qt** qt 6. 47 gal = **188 qt** qt

7. 47 qt = **11.75 gal** gal 8. 11 qt = **2.75 gal** gal

9. 29 qt = **928 fl oz** fl oz 10. 42 gal = **168 qt** qt
 $\times 32$

11. 28 fl oz = **0.875 qt** qt 12. 24 qt = **6 gal** gal

13. 49 qt = **1568 fl oz** fl oz 14. 26 gal = **104 qt** qt
 $\times 32$

15. 41 qt = **10.25 gal** gal 16. 9 gal = **1152 fl oz** fl oz

32 fl oz = 1 qt

16 fl oz = 1 pt

8 fl oz = 1 cup

Name : _____

Score : _____

Teacher : _____

Date : _____

6.5A practice**Common Percent Table***Fill in
the missing
values.*

Fraction	Decimal	Percent
$\frac{1}{20}$	0.05	5%
$\frac{1}{10}$	0.1	10 %
$\frac{1}{8}$	0.125	12.5%
$\frac{1}{5}$	0.2	20 %
$\frac{1}{4}$	0.25	25%
$\frac{3}{10}$	0.3	30 %
$\frac{1}{3}$	$0.\bar{3}$	33.3%
$\frac{3}{8}$	0.375	$37\frac{1}{2}\%$
$\frac{2}{5}$	0.4	40 %
$\frac{1}{2}$	0.5	50%
$\frac{3}{5}$	0.6	60%
$\frac{5}{8}$	0.625	62.5%
$\frac{2}{3}$	$0.\bar{6}$	$66\frac{2}{3}\%$
$\frac{7}{10}$	0.7	70 %
$\frac{3}{4}$	0.75	75 %
$\frac{4}{5}$	0.8	80%
$\frac{9}{10}$	0.9	90%



6.5A Percents, Fractions, Decimals Practice

Write each as a fraction.

1) 50% $\boxed{\frac{1}{2}}$

2) 54% $= \boxed{\frac{27}{50}}$

3) 385% $3\frac{85}{100} = \boxed{3\frac{17}{20}}$

4) 96% $= \boxed{\frac{24}{25}}$

5) 14% $\boxed{\frac{7}{50}}$

Write each as a decimal. Round to the thousandths place.

6) 38% $\boxed{0.38}$

7) 0.8% $\boxed{0.008}$

8) 0.5% $\boxed{0.005}$

9) 7% $\boxed{0.07}$

10) 80% $\boxed{0.8}$

Write each as a percent. Round to the nearest tenth of a percent.

11) 0.98 $\boxed{98\%}$

12) 0.5 $\boxed{50\%}$

13) 0.09 $\boxed{9\%}$

14) 0.34 $\boxed{34\%}$

15) 0.92 $\boxed{92\%}$

16) $\frac{13}{45}$ $0.2\bar{8}$ $\boxed{28.\bar{8}\%}$
 $\boxed{28.9\%}$

17) $\frac{3}{25}$ $\boxed{12\%}$

18) $\frac{1}{5}$ $\boxed{20\%}$

19) $\frac{11}{15}$ $\boxed{73.3\%}$

20) $\frac{21}{31}$ $\boxed{67.7\%}$

$0.7\bar{3}$

0.6774

6.5A Finding a Percent of a Number practice

Solve each problem.

1) What is 40% of 68?

$$0.4 \cdot 68 = \boxed{27.2}$$

2) What is 46% of 68?

$$0.46 \times 68 = \boxed{31.28}$$

3) What is 36% of 44?

$$0.36 \cdot 44 = \boxed{15.84}$$

4) 69% of 46 is what?

$$0.69 \times 46 = \boxed{31.74}$$

5) What is 50% of 45?

$$.5 \cdot 45 = \boxed{22.5}$$

6) What is 59% of 21?

$$0.59 \times 21 = \boxed{12.39}$$

7) 66% of 21 is what?

$$0.66 \times 21 = \boxed{13.86}$$

8) 72% of 22 is what?

$$0.72 \times 22 = \boxed{15.84}$$

9) 56% of 45 is what?

$$0.56 \times 45 = \boxed{25.2}$$

10) What is 53% of 21?

$$0.53 \times 21 = \boxed{11.13}$$

11) What is 33% of 68?

$$0.33 \times 68 = \boxed{22.44}$$

12) What is 76% of 46?

$$0.76 \times 46 = \boxed{34.96}$$

13) 43% of 44 is what?

$$0.43 \times 44 = \boxed{18.92}$$

14) 79% of 22 is what?

$$0.79 \times 22 = \boxed{17.38}$$

15) What is 63% of 45?

$$0.63 \times 45 = \boxed{28.35}$$

Chapter 6 Answers (continued)

11. $z = 4$ 12. $a = 28$ 13. $r = 52$ 14. $t = 48$
15. $c = 6.3$ 16. $e = 18$

Reteaching 6-3

- 1.a. $\frac{MN}{ST} = \frac{MP}{SW}, \frac{MN}{ST} = \frac{NP}{TW}$ b. $\frac{20}{15} = \frac{NP}{24}$,
 $SW = 27, NP = 32$ 2. $DK = 55, RV = 84$
3. $AN = 39, GS = 42$

Reteaching 6-4

1. $\frac{1}{4}$ 2. $\frac{1}{6}$ 3. $\frac{5}{6}$ 4. 1 5. $\frac{3}{4}$ 6. 0 7. $\frac{1}{20}$ 8. $\frac{1}{2}$
9. $\frac{1}{5}$ 10. 0 11. $\frac{11}{20}$ 12. $\frac{2}{5}$ 13. $\frac{1}{4}$ 14. 1
15. $\frac{1}{5}$ 16. $\frac{1}{2}$

Reteaching 6-5

1. 70% 2. 60% 3. 55% 4. 68% 5. 20%
6. 39% 7. 5% 8. 26% 9. 62.5%
10. 18.75% 11. $\frac{3}{20}$ 12. $\frac{1}{8}$ 13. $\frac{19}{25}$ 14. $\frac{7}{50}$
15. $\frac{3}{5}$ 16. $\frac{97}{100}$ 17. $\frac{1}{4}$ 18. $\frac{3}{10}$ 19. $\frac{41}{50}$ 20. $\frac{11}{16}$

Reteaching 6-6

1. 80% 2. 75% 3. 68% 4. 127.5%
5. 87.5% 6. 26.3% 7. 28.8 8. 57 9. 78
10. 26.4 11. 12.2 12. 14.5 13. 70
14. 300 15. 16 16. 30,666.7 17. 1,607.7
18. 64.7

Reteaching 6-7

1. 140% 2. 65% 3. 66.7% 4. 87.5%
5. 37.5% 6. 22.2% 7. 39 8. 0.1 9. 102
10. 117 11. 7 12. 47.3 13. 63.2 14. 70.8
15. 140 16. 175 17. 384 18. 325

Reteaching 6-8

1. 12.5% 2. 66.7% 3. 126.7% 4. 700%
5. 62.5% 6. 75% 7. 40% 8. 175% 9. 75%
10. 37.5% 11. 45% 12. 33.3% 13. 30.3%
14. 12% 15. 100% 16. 68%

Reteaching 6-9

1. \$25.50 2. \$81.60 3. \$203.50 4. \$143.55
5. \$452.25 6. \$14.25 7. \$115.60 8. \$594.30
9. \$17.99 10. \$1.68

Reteaching 6-10

1. \$90; \$1,890 2. \$1,890; \$94.50; \$1,984.50
3. \$1,984.50; \$99.23; \$2,083.73 4. \$2,083.73;
\$104.19; \$2,187.92 5. \$2,187.92; \$109.40;
\$2,297.32 6. \$2,297.32; \$114.87; \$2,412.19;
7. \$2,412.19; \$120.61; \$2,532.80 8. \$2,532.80;
\$126.64; \$2,659.44 9. \$2,659.44; \$132.97;
\$2,792.41 10. \$2,792.41; \$139.62; \$2,932.03,
\$2,932.03

Enrichment 6-1

1. 460 2a. $\frac{3}{10}$ 2b. $\frac{1}{20}$ 2c. $\frac{2}{5}$ 2d. $\frac{1}{4}$
3a. 423,200 people 3b. 3,385,600 people
4. 168 5a. $\frac{1}{3}$ 5b. $\frac{5}{12}$ 5c. $\frac{1}{4}$ 6. 29 7. $\frac{29}{42}$

Enrichment 6-2

1. Sample answers: $\frac{4}{5} = \frac{8}{10}, \frac{4}{8} = \frac{5}{10}$, true 2. true
3. true 4. true 5. false 6. false 7. true
8. true 9. $\frac{C+D}{D}, \frac{C-D}{D}$ 10. Sample answers:
 $\frac{9}{-1} = \frac{18}{-2}, \frac{5}{-1} = \frac{15}{-3}, \frac{15}{-1} = \frac{30}{-2}$ 11. yes

Enrichment 6-3

1. Check students' work. 2. Check students'
work. 3. Check students' drawings.

Enrichment 6-4

1. $\frac{1}{8}$, 1 to 7 2. $\frac{1}{2}$, 1 to 1 3. $\frac{3}{4}$, 3 to 1 4. $\frac{3}{8}$, 3 to 5
5. $\frac{a}{a+b}$ 6. 1 to 7 7. 13 to 3 8. 3 to 5
9. 3 to 1 10. $\frac{1}{8}$ 11. $\frac{13}{16}$ 12. $\frac{3}{8}$ 13. $\frac{3}{4}$

Enrichment 6-5

1. 40% E 2. 35% A 3. 30% A 4. 8% A
5. 25% I 6. 20% G 7. $33\frac{1}{3}\%$ R 8. 80% C
9. 37.5% N 10. 2% D 11. 3% S 12. 200%
W 13. 2.5% L
A SCALE DRAWING

Enrichment 6-6

1. 400 2. 60%, 35%, 7% 3. age 20-39
4. 120 males 5. 12.5% 6. 6,400 females
7. 30 respondents 8.a. 35% b. 14 respondents